



Geon™ Vinyl Rigid Extrusion L7005

Rigid Polyvinyl Chloride

Key Characteristics

Product Description

Geon L7005 is recommended for whites and light pastel colors only. Not recommended for horizontal applications such as railing and decking except in white.

General

Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Impact Resistance	• Good Weather Resistance	
Uses	• Outdoor Applications	• Profiles	• Windows & Doors
Forms	• Cube		
Processing Method	• Extrusion		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.46	1.46	ASTM D792
PVC Cell Classification	1-42434-33	1-42434-33	ASTM D4216
PVC Cell Classification	15354	15354	ASTM D1784
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus ²	413000 psi	2850 MPa	ASTM D638
Tensile Strength ² (Yield)	6260 psi	43.2 MPa	ASTM D638
Flexural Modulus	430000 psi	2960 MPa	ASTM D790
Flexural Strength	12300 psi	84.8 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact 73°F (23°C), 0.125 in (3.18 mm), Compression Molded	11 ft·lb/in	590 J/m	ASTM D256A
Drop Impact Resistance 73°F (23°C) ³ 73°F (23°C) ⁴	1.65 in·lb/mil > 4.00 in·lb/mil	73.4 J/cm > 178 J/cm	ASTM D4226
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore D, 15 sec)	80	80	ASTM D2240
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load ⁵ 66 psi (0.45 MPa), Annealed, 0.125 in (3.18 mm)	165 °F	73.9 °C	ASTM D648
Deflection Temperature Under Load 264 psi (1.8 MPa), Annealed, 0.125 in (3.18 mm), Compression Molded ⁶ 264 psi (1.8 MPa), Annealed, 0.125 in (3.18 mm), Compression Molded ⁵	166 °F 160 °F	74.4 °C 71.1 °C	ASTM D648
CLTE - Flow	3.6E-5 in/in/°F	6.4E-5 cm/cm/°C	ASTM D696
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating (0.0295 in (0.749 mm), ALL)	V-0	V-0	UL 94
Additional Information	Typical Value (English)	Typical Value (SI)	
Ease of Sizing	Acceptable	Acceptable	

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Note: Physical properties based on L7005 tan 3210 sample.

Processing Information

Extrusion	Typical Value (English)	Typical Value (SI)
Melt Temperature	360 to 380 °F	182 to 193 °C

Notes

¹ Typical values are not to be construed as specifications.

² Type I, 0.20 in/min (5.1 mm/min)

³ Procedure A, C.125 Dart

⁴ Procedure B, C.125 Dart

⁵ Annealed at 50 deg.C

⁶ Annealed at 60 deg.C

CONTACT INFORMATION

Americas

United States - Avon Lake
+1 440 930 1000

United States - McHenry
+1 815 385 8500

Asia

China - Guangzhou
+86 20 8732 7260

China - Shenzhen
+86 755 2969 2888

China - Suzhou
+86 512 6823 24 38

China - Suzhou
+86 512 6265 2600

Hong Kong -
+852 2690 5332

Taiwan - Yonghe City,
+886 9396 99740, +886 2929 1849

Europe

Germany - Gaggenau
+49 7225 6802 0

Spain - Barbastro (Huesca)
+34 974 310 314



Beyond Polymers.

Better Business Solutions. SM

www.polyone.com

PolyOne Americas

33587 Walker Road
Avon Lake, Ohio 44012
United States
+1 440 930 1000
+1 866 POLYONE

PolyOne Asia

No. 88 Guoshoujing Road
Z.J Hi-tech Park, Pudong
Shanghai, 201203, China
+86 21 5080 1188

PolyOne Europe

6 Gälllewee
+352 269 050 35

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